

PREFACE

WE INVEST IN RESEARCH AND INNOVATION TO DISCOVER NEW AND BETTER WAYS TO REACH MORE PEOPLE WITH HIGH QUALITY EYE CARE.

The Fred Hollows Foundation is an international development organisation, committed to a world in which no person is needlessly blind or vision impaired.

Today, there are still 36 million people who are blind and more than 1 billion people who live with some form of vision impairment. The challenge of ending avoidable blindness and vision impairment is huge and growing. As the world's population ages and grows, the need for eye care grows. Despite all the work that has been done to eliminate avoidable blindness, we know that if we don't scale up our efforts, blindness will triple by 2050.

Business as usual will not see us meet the challenge. We must discover and take to scale new ways to reach more people with high quality eye care. New tools and technologies will be part of the solution, but technology alone won't solve it. The real breakthroughs will involve new business models, new collaborations, and more efficient models of care.

Our Research and Innovation for Impact Strategy **2020 to 2024** outlines our research and innovation objectives and the approaches we will take to achieve them over the coming five years.



OUR OBJECTIVES

WITH OUR PARTNERS, WE INNOVATE AND FACILITATE HIGH QUALITY HEALTH SERVICES RESEARCH TO IMPROVE THE QUALITY, PRODUCTIVITY AND ACCESSIBILITY OF EYE CARE FOR THOSE LIVING IN LOW RESOURCE SETTINGS.

Our research and innovation is grounded in our extensive experience strengthening eye care practice and policy.

We understand the nature and complexity of the challenges faced by healthcare organisations in low-resource settings and seek to work with them, eye care consumers, and other partners to identify, test, scale-up and showcase innovative solutions.

We are uniquely placed to undertake real world, applied research that catalyses meaningful change in the way eye care is delivered to those most in need.

Five research and innovation objectives have been identified to guide investments over the coming five year strategic term. These objectives represent the specific contribution of research and innovation activities, to achievement of The Foundation's four strategic goals.

The goals articulate our commitment to eliminating trachoma as a public health problem, and enhancing accessibility of effective treatment for cataract, refractive errors and diabetic retinopathy.

OUR RESEARCH AND INNOVATION OBJECTIVES

- 1. Discover, design, and test new and better ways to deliver high quality **cataract care** in low-resource settings
- Discover, design, and test new and better ways to address trachoma end game challenges
- Discover, design, and test new and better ways to deliver high quality **refractive error care** in low-resource settings
- Discover, design, and test new and better ways to deliver affordable **diabetic retinopathy care** in low-resource settings
- Contribute to **global data** on the prevalence and causes of blindness, and the responses and services needed to address it

OUR AREAS OF EXCELLENCE AND EXPERTISE

Five areas of excellence and expertise will help us achieve our objectives.

OUR AREAS OF EXCELLENCE AND EXPERTISE

- A. Whole of system, integrated people-centred eye care
- **B.** Innovative finance and business models
- C. Eye health economics and financing
- **D.** Behaviour change and health promotion
- E. Digital and other technologies



1. Discover, design, and test new and better ways to deliver high quality cataract care in low-resource settings

Cataract remains the leading cause of blindness globally, responsible for half the world's blindness. While cost-effective, uncomplicated solutions exist to diagnose and treat cataracts, a growing and ageing population means the number of people with cataract blindness continues to grow. Developing countries experience the largest burden.

Our research and innovation will find ways to improve the efficiency of cataract care in low-resource settings so more people receive the treatment they need, while maintaining high-quality outcomes and ensuring patients needs are always at the centre.

We will achieve this by focusing on the four priorities outlined below.

Cataract Innovate to improve Innovate to better the quality, leverage strategic productivity and purchasing for Synthesise, share accessibility of Innovate to eye care and use emerging cataract services enhance financial and existing protection in eye evidence on care cataract care **Strategic Initiatives**

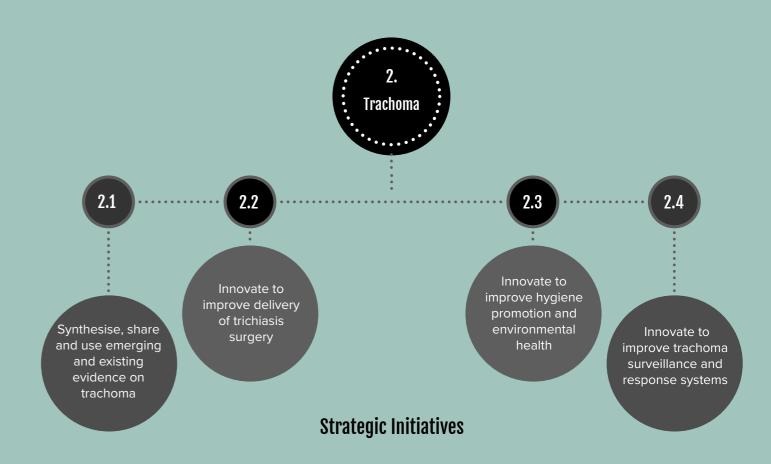
2. Discover, design, and test new and better ways to address trachoma end game challenges

Trachoma is the leading infectious cause of blindness with 157.7 million people living in areas where they are at high risk of developing trachoma. Whilst significant progress towards elimination of trachoma as a public health problem has been made, more work is required if trachoma is to be eliminated globally over the next decade.

Research and innovation are critical in order

to find solutions to emerging 'end game' challenges. As we approach elimination we enter a new phase of programming - one that presents challenges we haven't faced before. We intend to respond by finding, designing and testing new and better ways to deliver trrachoma programs.

We will achieve this by focusing on the four priorities outlined below.



Discover, design, and test new and better ways to deliver high quality refractive error care in low-resource settings

The magnitude of the emerging global refractive error (RE) crisis is immense. In many low-resource settings there are limited services, and glasses are often unacceptable, unavailable or unaffordable. In emerging markets, there is an issue of unregulated glasses supply, and poor quality care.

Our research and innovation will find more effective and affordable ways to reach more people with glasses and overcome the barriers that exist to people wearing them.

We will achieve this by focusing on the four priorities outlined below.

Innovate Innovate to to improve the quality, increase use of glasses and RE productivity and Synthesise, share Innovate services accessibility of RE and use emerging to improve services and existing approaches evidence on to myopia refractive error prevention **Strategic Initiatives**

4. Discover, design, and test new and better ways to deliver affordable diabetic retinopathy care in low-resource settings

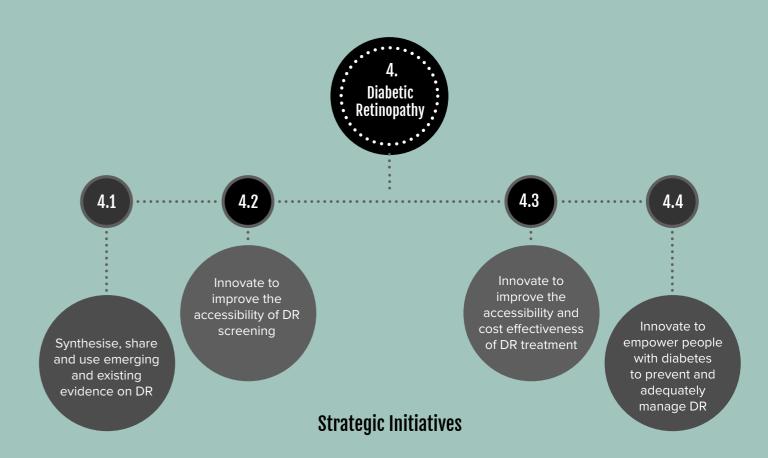
Diabetic retinopathy (DR) is the leading cause of blindness in the working-age population and it disproportionately affects people with diabetes in low-resource settings. Effective, efficient, sustainable, and scalable approaches for the management of DR are still lacking.

To protect their sight, it is recommended that people with diabetes have their eyes checked

annually, but access to eye checks and to DR treatment is unavailable or unaffordable to many.

Our research and innovation will find more efficient and affordable ways to deliver DR care.

We will achieve this by focusing on the four priorities outlined below.



5. Contribute to **global data** on the prevalence and causes of blindness, and the responses and services needed to address it

Data can be a powerful driver of change. Global data on current estimates and projections of the burden of blindness and visual impairment, national performance against key global eye health indicators, and data on the coverage of key eyecare services and responses are powerful tools that assist the work of policy makers, health planners, eye health professionals, NGOs, and consumer groups and advocates.

To ensure ongoing availability of high quality data, we will continue to undertake and support population eye health surveys. We will make targeted investments to address key eye health data gaps to ensure global, national and regional decision makers have access to the data they need to allocate resources effectively.

We will achieve objective five through the conduct of four strategic initiatives.





OUR VISION

A WORLD IN WHICH NO PERSON IS NEEDLESSLY BLIND OR VISION IMPAIRED

THE CONTRIBUTION OF RESEARCH AND INNOVATION

We honour Fred Hollows' pioneering spirit by discovering new and better ways to reach more people with high quality eye care.

With our partners, we innovate and facilitate high quality health services research to improve the quality, productivity and accessibility of eye care for those living in low-resource settings.

RESEARCH AND INNOVATION FOR IMPACT 2020 TO 2024 STRATEGY

Discovering new and better ways to reach more people with high quality eye care

OUR RESEARCH AND INNOVATION OBJECTIVES

Discover, design, and test new and better ways to deliver high quality **cataract care** in low-resource settings

Discover, design, and test new and better

- 2. ways to address trachoma end game challenges
- Discover, design, and test new and better ways to deliver high quality **refractive error care** in low-resource settings
- Discover, design, and test new and better ways to deliver affordable diabetic retinopathy care in low-resource settings
- Contribute to **global data** on the prevalence
 and causes of
 blindness, and the
 responses and services
 needed to address it

- Synthesise, share and use emerging and existing evidence on cataract care
- 2.1 Synthesise, share and use emerging and existing evidence on trachoma
- Synthesise, share and use emerging and existing evidence on refractive error
- Synthesise, share and use emerging and existing evidence on DR

Innovate to improve the

5.1 Investing in eye health data

- 1.2 Innovate to improve approaches to eye care purchasing
- 2.2 Innovate to improve delivery of trichiasis surgery
- 3.2 Innovate to increase use of glasses and RE services
- 4.2 accessibility and affordability of DR treatment
- 5.2 Strengthening eye health indicators

- Innovate to improve the quality, productivity and accessibility of cataract services
- Innovate to improve hygiene promotion and environmental health
- Innovate to improve the quality,
 3.3 productivity and accessibility of RE
 services
- Innovate to empower people with diabetes to prevent and adequately manage DR
- 5.3 Strengthening methods, platforms and tools for collecting and sharing eye health data

- 1.4 Innovate to reduce out of pocket costs for cataract care
- Innovate to improve post-validation trachoma surveillance and response systems
- 3.4 Innovate to improve approaches to myopia prevention
- 4.4 Innovate to improve the accessibility of DR screening
- 5.4 Demonstrating the social and economic benefits of vision and eye health

OUR AREAS OF EXCELLENCE AND EXPERTISE

A.

Whole of system, integrated people-centred eye care

- Innovative finance and business models
- Eye health economics and financing
- D. Behaviour change and health promotion
- E. Digital and other technologies

HOW WE DELIVER

The Foundation's commitment to research, innovation, and to improving and evaluating our work sets us apart.

We believe in delivering the best possible solutions, backed by evidence. And we believe that the people we serve should have a strong voice in developing solutions to address the challenges they experience.

We are committed to trial new approaches and continuous quality improvement and excellence. We believe that sharing our insights, facilitating knowledge exchange with our partners and scaling-up innovative solutions is key to driving large scale systemic change.

The Foundation has an extensive network of global and local collaborators, policy makers, and service delivery partners. We are uniquely placed to facilitate the incubation of new solutions to global and local eye health challenges. And, we are uniquely placed to connect frontline service providers with researchers, innovators, and private sector organisations and investors.



We conduct health services research, and use innovation and knowledge translation processes to optimise our programs and influence broad policy and practice change.

USING INNOVATION AND RESEARCH TO ACHIEVE CHANGE

WE WORK ALONGSIDE OUR PARTNERS AND THE COMMUNITIES WE SERVE, TO UNDERSTAND THE CHALLENGES, AND DESIGN AND TEST NEW SOLUTIONS.

We combine on-the-ground expertise with disciplines like human-centred design, health economics, behavioural science, and innovative finance to nurture breakthrough ideas to scale.

A. Understand and stay informed

Interpreting key eye care challenges, and sourcing and curating evidence relating to contexts, emerging trends and solutions. We draw on evidence from our in-country programs, insights from global and local discussions, and published evidence.

B. Co-design

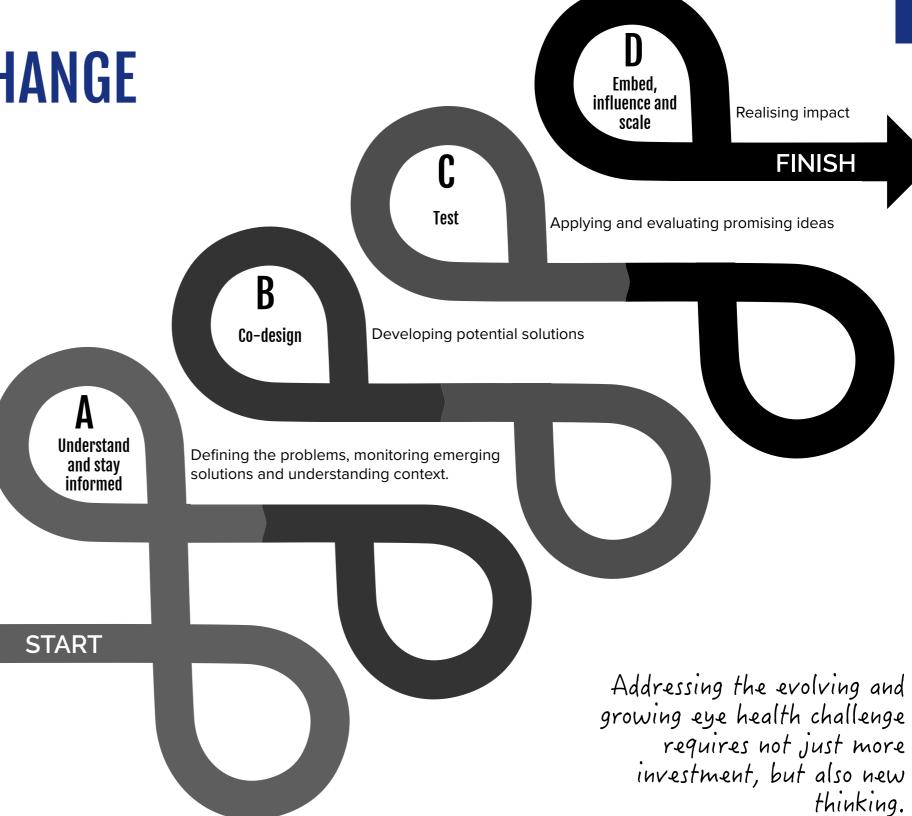
Identifying or designing novel tools, approaches and models of care. We co-create solutions with partners, experts and communities, and prototype and pilot them, learning quickly and failing fast. We design for scale at the outset.

C. Test

Subjecting new tools, models and approaches to feasibility, usability, and cognitive testing, to cost-effectiveness study, and then to efficacy and effectiveness trials where appropriate. We collaborate with our in-country partners and ally them with world leading researchers.

D. Embed, influence and scale

Embedding effective and sustainable solutions into practice, influencing global and local policy, and taking sound commercial solutions to market. We leverage our global and local networks and expertise and engage public and private partners to achieve scale and impact.





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